

REMARKS

Claims 1 and 3-9 are presented for consideration, with Claims 1 and 7-9 being independent.

Initially, Applicants note with appreciation that Claims 8 and 9 are indicated as containing patentable subject matter. As will be appreciated, Claims 8 and 9 are now presented in independent form and are submitted to be allowable. In addition, an editorial change has been made to Claim 7 to overcome the objection set forth in paragraph [0005] (page 8) of the specification.

Claims 1 and 3-7 stand rejected under 35 U.S.C. §103 as allegedly being obvious over Iyer '480. This rejection is respectfully traversed.

Claim 1 of Applicants' invention relates to a mesoporous silica structure having a plurality of mesopores. The structure includes a dendritic framework having mesopores, wherein 90% or more of the mesopores available in a 500 nm × 500 nm area pass through the framework in a direction perpendicular to a longitudinal direction of the framework.

In accordance with Applicants' invention, a high performance mesoporous silica structure can be provided.

The Iyer patent uses mesoporous silica as a sample holder for desorption/ionization mass spectrometry. As disclosed, the mesostructured silica, shown in Figure 1, is said to have an ordered arrangement of columnar micelles of surfactant, with the columnar micelles surrounded by silica organized in the form of an array (see column 4, lines 42-45).

In contrast to Claim 1 of Applicants' invention, however, it is respectfully submitted that Iyer does not teach or suggest, among other features, a dendritic framework having mesopores.

In this regard, the Office Action takes the position that Iyer provides a dendritic framework, relying on Figures 1-9 and several citations throughout the abstract and specification (see paragraph [0004] (page 3)). It is respectfully submitted, however, that while Iyer may disclose the mesoporous silica structure as “an ordered cubic array of interconnected pores” (see column 5, lines 48-50), this is not a dendritic framework. Moreover, the portions of the specification relied on in the Office Action do not teach or suggest a dendritic framework, but merely disclose the structure as, for example, a hexagonal or cubic array (column 4, lines 46-49), or an ordered arrangement of micelles (column 6, lines 54-57). It is respectfully submitted, therefore, that Iyer cannot be relied on for teaching or suggesting a mesoporous silica structure with a dendritic framework as set forth in Claim 1.

Claim 7 relates to a porous material formed onto a plurality of particles, with each particle having a mesoporous silica structure with a plurality of mesopores and comprising, among other features, a dendritic framework having mesopores. Claim 7 is thus also submitted to be patentable over Iyer.

Accordingly, it is submitted that Iyer fails to render obvious Applicants’ invention as set forth in Claims 1 and 3-7, and thus reconsideration and withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

Thus, it is submitted that Applicants’ invention as set forth in independent Claims 1 and 7-9 is patentable over the cited art. In addition, dependent Claims 3-6 set forth additional features of Applicants’ invention. Independent consideration of the dependent claims is respectfully requested.

The amendments to the claims were not presented earlier as it was believed that the previously presented claims would be found allowable. This Amendment does not add any

additional claims. Moreover, the Examiner's familiarity with the subject matter of the present application will allow an appreciation of the significance of the amendments herein without undue expenditure of time and effort. Finally, the Amendment does not raise new issues requiring further consideration or search. Accordingly, it is submitted that entry of the Amendment is appropriate.

In view of the foregoing, reconsideration and allowance of this application is deemed to be in order and such action is respectfully requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

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